Delivery Order Decision Document

The evaluation team for the Lightweight Rainfall Radiometer (LRR) Accommodation Study met and reviewed the core spacecraft under the Rapid II Contract.

Delivery Order Description

The delivery order is for a LRR Accommodation Study, which is an accommodation study to determine the feasibility of accommodating the lightweight rainfall radiometer on board an RSDO, or potential RSDO, spacecraft in two different launch configurations.

All core spacecraft under the RSDO Rapid II Contract were evaluated however one delivery order will be awarded per vendor, as stated in the Evaluation Criteria forwarded by electronic mail (email).

Evaluation Procedures

Evaluation was based upon clause I.A.7 (a) "Procedures for Fair Opportunity for Consideration." Again all spacecraft under the Rapid II Contract were considered for award of a study. Since proposals were not accepted from the Vendors for the LRR Accommodation Study, price of the study was not considered an evaluation factor.

Evaluation Criteria were developed from the Instrument Synthesis and Analysis Laboratory (ISAL) derived requirements and grouped by mission criticality into primary and secondary criteria.

Primary Criteria	**Mission Requirements**		**Acceptable Limits**
Launch Vehicle Compatibility	Pegasus		Pegasus or SELVES Class
PL Power (OAV)	60W		30-180 W
PL Mass	40kg		20-120kg
Orbit	600km SS		Leo > 60 Deg
Lifetime	5 Years		>=2 Years
Propulsion	47m/s		Any

Secondary Criteria	**Mission Requirements**	
Orbital Knowledge	100m	
C&DH	Mil-Std-1553	
External Envelope	1m dia x 1.3m high	
Pointing Control	0.1 R/P/Y (deg)	
Downlink	1Mbps	

From the above criteria, RSDO evaluated every spacecraft (s/c) on the catalog. The s/c were evaluated against the four step process listed below and up to four Delivery Orders (DOs) were awarded.

If four vendors were found acceptable by using Step 1, then no other steps were used. However, if four vendors were not found in Step 1, then Step 2 was used to evaluate the remaining s/c. Furthermore, Step 3 was used for evaluation purposes if four vendors for award were not found in Steps 1 and 2. Next, Step 4 was used, as a determiner if more than four vendors were found acceptable in Steps 1-3. Finally, if a vendor has multiple acceptable s/c that vendor will only be awarded one study.

Objective Phase:

1. Core s/c will be evaluated by comparing the primary criteria including the Acceptable Limits and Mission Requirements to determine if it falls within the acceptable range.

2. If four Vendors are not found to be acceptable in step 1, then the core s/c including contract options will be evaluated to determine if it falls within the acceptable range.

Subjective Phase:

3. If four Vendors are not found in steps 1 and 2 the remaining s/c will be evaluated to determine the risk of implementation and feasibility.

4. If more than four vendors are found to be acceptable in steps 1-3 the secondary criteria will be evaluated using engineering judgement to determine the s/c risk of implementation.

Evaluation Team Members:

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Jim Adams
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Evaluation Results

The following s/c meet the mission requirements acceptable limits and present acceptable risk, therefore are found suitable for an LRR Accommodation Study:

Ball Aerospace (BCP 600), Orbital Corp. (LeoStar), Orbital Corp. (MicroStar), and Spectrum-Astro (SA-200S), and TRW (T200B)

The following s/c were found unsuitable based on noted criteria for the LRR Accommodation Study:

Vendor	**S/C**	**Noted Criteria**
Ball Aerospace	BCP 2000	PL Power, Mass
Lockheed Martin	LM 900	PL Power, Mass
Orbital	PicoStar	PL Power, Orbit, Lifetime, Propulsion
Orbital	MiniStar	PL Power, Propulsion
Orbital	MidStar	LV Compatibility, PL Power, PL Mass, Orbit, Propulsion
Orbital	StarBus	LV Compatibility, PL Power, PL Mass, Orbit
Surrey	Minisat-400	Risk
Spectrum Astro	SA-200HP	PL Power, PL Mass, Orbit
TRW	T100	PL Power
TRW	T200A	Risk

All vendors were found to have no past performance concerns. Based on the preceding evaluation the following vendors were recommended for award of a study for LRR: Ball Aerospace, Orbital Sciences Corp., Spectrum-Astro Inc., and TRW.

Decision:

Based on the foregoing, I select Ball Aerospace, Orbital Sciences Corp, Spectrum-Astro Inc. and TRW for receipt of a Delivery Order for the LRR Accommodation Study. I therefore determine that, based on the evaluation team findings, that the four vendors recommended for selection represent a fair and reasonable price to the Government.

William A. Watson
Chief, RSDO